1. **Welcome/Apologies/Introductions**


3. **Ongoing Approved Projects**
   a) **Extended differential reference method** – B. Davies – Manuscript in preparation comparing the three methods, USA, France and Sweden, with Mikael Roussel as the first author. The ICSH consensus method has now been agreed and work has been completed in improving the counting of blasts, NRBCs and T-cells. The consensus protocol will continue to be optimised using 20 normal samples and 80 abnormal samples and the target is to complete by December 2010. If all results are acceptable a full multi institutional trial will then go ahead. A grant proposal to Wallace Coulter Foundation will be submitted by March 2011.

   b) **ESR Standardisation** – J. Jou – ICSH Document has been sent to the working panel. Comments to come back from two people. C Briggs said that it read more like a review than a guideline and a title change should be considered to reflect this. The manuscript should be submitted for publication by the end of November 2010.

   c) **Reference Haemoglobin material (Eurotrol)** - B. Davis stated that the labs that did the initial testing for Eurotrol will be asked to re-test (this is done every two years). Sale of this material brings in 250 – 300 Euros per quarter. Keith Hyde stated the WHO has expressed an interest in this material. They have not contacted ICSH yet.

   d) **Evaluation of automated haematology analysers (update of 1994 document).** C. Briggs suggested this project should wait until the flow differential has been completed to review and would not take long to write. C. Briggs will now chair, G. Zini, co-chair along with M. Roussel. Representatives from Industry will also be included: Y Nagai (Nihon Kohdon), P O’Neil (Beckman Coulter), S Mead (Siemens), M Zheng (Mindray), O Segurado (Becton Dickinson), Sysmex, Horiba Medical and Abbott to name a representatives.

   e) **Schistocyte Assessment** – G. Zini – Preliminary final draft paper has been sent to the panel for comments and an external advisor, Barbara Bain. It will be sent to three other
advisors, Elkin Simpson, Professor Kawai and Jin-Yeong Han. Recently 3 false positive fragmented red cell counts on the automated haematology instruments have been found in 60,000 samples. This is a very rare event but previously it has been reported that there are no false positives on the instruments. The manuscript should be submitted for publication by the end of November 2010.

f) Update on HGB A2 (and HGB F) Methods and Standards (Update of 1978 document) – A. Stephens –
   HGB A2: This document is ready for submission.
   HGB F: Will be ready in the next 4 – 8 weeks.
   Both papers will be submitted to IJLH to be published in the same edition.
   Comments from the Board regarding the manuscript should be sent as soon as possible and three external advisors will be asked to comment, Professor Porter, Sir David Weatherall and others to be identified. A 5 week deadline should be applied for receiving comments back.

g) Standardisation of Cell Morphology Grading – S. McFadden – Not present at the meeting, presented by C Briggs. A questionnaire has been sent to the working group regarding cell terminology and grading. This has been completed and returned to Stefanie McFadden but a final analysis of results is not yet available. Ziling Huo (Mindray) requested that one or two people from China should be added to the working group, names will be sent to Carol Briggs. This project was considered to be high priority by all attendees. Detailed analysis, line by line, of each cell or abnormality needs to be discussed and a consensus view reached. It was proposed that a one day workshop should be organised, inviting all responders to attend. This should be either before or after the ISLH meeting in 2011. Funding to support attendees will be sought form industry. Action: Sam Machin and Bruce Davis to confirm funding available.

h) Sample Stability – J.L. Vives Corrons, R. Simon. Neither were present at the meeting. A draft paper had been sent just prior to the meeting. C Briggs presented the initial results. Her concerns were that there was no statistical analysis of the results, only graphical representation and “other” cells have not been defined. C Briggs will contact the authors. Another draft to be submitted.

i) PNH Diagnostic guidelines – B. Davis – Guideline published by Cytometry (journal for the Clinical Cytometry Society) is complex. ICSH are considering whether to produce an editorial commentary endorsing, but critically assessing, this document for an international audience.

j) MPV Standardisation – S. Machin – Seven blood cell companies have been contacted regarding how they derive the MPV and their normal range, all have responded. The study should determine the normal range in healthy subjects and study time dependent platelet swelling in EDTA. Industry representatives should nominate 3 laboratories to test 30 normal samples at defined timed intervals over 24 hours. Gina Zini has some data on MPV from four different analysers and will send to Sam Machin. A stabilised sample could be sent to all laboratories from UK NEQAS (H).

k) Standardisation of bone marrow immunohistochemistry– Emina Torlakovic. Dr Szu-Hee Lee presented as Dr Torlakovic was not present at the meeting. The aim is to develop guidelines for standards and processes in immunohistochemistry testing performed on bone marrow tissue biopsies. The project design and literature review is complete. Spleen, tonsil and bone marrow biopsies will be used. Under investigation will be fixatives and
ICSH
decalcification, IHC Staining and selection of markers. Several laboratories will perform
testing and interpretation of results will be performed by an expert panel. Testing should be
complete by Dec 2010 and results evaluated by January 2011. Guidelines first draft – Feb
2011, submit for publication – 2011.

1) Recommendation regarding differential reporting – David Zwick – A telephone conference
was arranged as Dr Zwick could not attend the meeting. This was with regard to reporting
only the absolute differential count. Most attendees at the meeting felt that both the absolute
and percentage differential should be reported but a discussion will be held again at the
meeting in New Orleans, when Dr Zwick will be in attendance.

4. Potential new projects

Submitted proposals:
a) Guidelines for validation of cell based assays - B. Davis – To provide guidelines for
validation of cell based fluorescent assays. FDA intends to regulate laboratory developed
tests (LDTs) currently with no strategic plan of implementation. Relevance to cell based
fluorescence measurements is that currently no guideline exists either for laboratory
practice or regulatory assessment. Panel or committee co-chaired by Bruce Davis (Trillium
Diagnostics, USA), Brent Wood (President, International Clinical Cytometry Society, USA),
David Barnett (UK NEQAS). Panel of 8-10 expert writers, 6-8 observers, or commercial
representative of corporate sponsors, (5,000 Euro unrestricted grant to ICSH). Membership
to represent multiple countries (USA, UK, EuroFlow, Pharma clinical trials, FDA, etc). Paul
Harrison should be invited as an expert due to his expertise with platelets. Committee
membership completed by Dec 2010. Outline with writing assignments to be developed Jan
2011. Draft completed by May 2011 or prior to ICSH meeting in New Orleans. Final Draft
submitted to ICSH for review and approval by October 2011. Published guideline in Clinical
Cytometry or IJLH on Validation of IVD Cell Based Fluorescence Assays. This guideline was
considered important and should go ahead.

New proposals:
b) Guidelines for the automated counting of body fluids (G Bourner)
c) Standardisation of test performance based on clinical need (Agim Beshiri)
d) Standardisation of haematlogy reporting units, terminology and reference ranges (J Jou
and K Hyde)

These proposals will be presented at the Spring ICSH meeting in New Orleans 2011.

5. Relationship with other professional bodies

a. ISLH - ICSH New Orleans Spring 2011 Meeting: ICSH session is Saturday, the afternoon
of the 7th of May for one and a half hours to two hours.
The proposed presentations are:
Morphology grading (Stefanie McFadden, USA)
Bone marrow immunohistochemistry standardization (Emina Torlakovic, Canada)
Validation of laboratory derived tests (Bruce Davies, USA)
Update on ICSH projects (Carol Briggs, UK)
This has been forwarded to Terry Fawcett.
M Proytcheva reported that ISLH will pay for economy airfare, registration for the meeting and hotel for ICSH speakers.

b. ISH – ISH European African division will be meeting in Brighton, April 2011, in conjunction with the BSH. S. Machin will write to ISH about this and whether ICSH could make a presentation. The next world congress will be in Cancun, Mexico in April 2012. S. H. Lee to contact their president about an ICSH symposium there.

c. CLSI – The chairperson, Dot Adcock, was not invited to this meeting due to an oversight. Sam Machin to write to apologise and update.

d. EHA – No further correspondence. Sam Machin will write to Irene Roberts to see if they want to be affiliated.

e. JCTLM – No update J Hoffmann not at meeting. Sam Machin to follow up.

f. CEN – No further updates. They want to be kept up to date on our projects.

g. IJLH – S.H. Lee stated that IJLH will continue to publish ICSH standards and allow them to be on the ICSH website for no charge. ICSH Standards articles will be submitted to S. Kitchen or S.H. Lee for external review. The Impact factor for IJLH is 1.3.

h. WHO Report – The WHO are interested in the Hb standard project and the Hb A2 standard. Both of these were previous WHO international standards. The WHO liaison officer (Ms Ana Padilla) has been given contact details for Bruce Davis and Adrian Stephens. The WHO is also interested in the UK Standardisation project (CBC etc) and they have received the UK report. Keith Hyde is due to meet WHO officers in early 2011 and will provide a written update report for the ICSH in May 2011.

i. JSLH - Will provide the 4th survey using fresh blood for reference of automated hematology analyser on six manufacturers’ instruments on the 25th Nov 2010. JSLH is planning provide a reference method for the 5-part differential and reticulocyte counts using flow cytometry methods based on modified protocols from ICSH, three color FCM is the most available in Japanese laboratories.

j. CCS – Clinical Cytometry Society – There is no formal relationship with ICSH at this time. If CCS would like to formalize their relationship with ICSH, then a detailed proposal should be given at the spring meeting.

6. Any other Business.

a) A Stephens has received an e-mail from Suthat Fucharoen requesting that ICSH serve as a co-coordinating body for EQA for thalassaemia and other abnormal haemoglobins. This is badly needed due to the many different technologies used for measurement of abnormal haemoglobins and generally the user does not know much about the limitations of these methods.

b) All companies, Abbott, Beckman Coulter, Horiba, Mindray, Roche, Siemens, Sysmex, are in principle agreed to fund an extra workshop for the morphology group in New Orleans, May 2011. To be agreed and confirmed with Sam Machin and Bruce Davis.
c) Younger members are needed for ICSH and everyone, including industry members, should nominate clinicians or laboratory scientists that would contribute to the council.

7. **Date of next meeting.**

   **Thursday 5th of May 2011 meeting for 3 hours in New Orleans**
   **Saturday 7th of May 2011 ICSH presentation meeting in the ISLH session.**
   **Monday 9th of May Morphology workshop.**

   Autumn meeting, Switzerland, May 2011, dates to be confirmed.
   ISLH (ICSH) Nice May 2012
   ICSH autumn, California or Latin America.

Meeting Closed at 17:00

**ICSH Management Board Meeting, October 15th 2010**

1. **Financial Report** – Report given by B. Davis and filed with the Secretary. Available to Board Members upon request.

2. **Association with Industry** – Annual Dues for 2011 for both affiliate societies and corporate sponsors will remain the same as the 2011 rates.

3. **Formal Membership of Management Board and Council** – Representatives from affiliate societies and corporate sponsors were reviewed and updated (updated list below).

Meeting Closed at 12:00

**ICSH Management Board Membership**

Chairman – SJ Machin

Treasurer – B Davis

Vice Chairmen – J Jou, SH Lee

Scientific Secretary – C Briggs

Meeting Secretary – S McFadden

Terms for SJ Machin, B Davis, C Briggs and S McFadden are nearly up, successors and the process will be discussed at the next ICSH meeting in May, New Orleans.

IJLH Editor - S Kitchen / SH Lee

JSLH – Y Kawai

ISH – ISHEAD: A. Kamel
    ISHAPD: S.H. Lee
    ISHIAD: To be nominated

UK NEQAS (H) – K Hyde

ISLH – M Proytcheva / JY Han

ICSH representative at JCTLM- H Hoffman

WHO – K Hyde / R Simon

CLSI – D Adcock /D Sterry

Industry Representatives

Beckman-Coulter – R Hebert / P. O’Neill

Sysmex Corp – K Funakoshi / A Shirikami

Siemens – F Stelling / S Mead

Nihon Kohden – Y Nagai

Abbott – A Beshiri / H Hoffman

Horiba ABX Medical – F Seguy

Mindray – Ziling Huo / Min Zheng